

# ABSTRACT

To decrease costs in decoding a digital image signal.  
An image signal decoding apparatus stores forward reference  
5 frame data to be used for a decoding process in frame memories  
of a main memory provided in a common division, and also stores  
the frame data highly likely to be used for a motion compensation  
process in a motion compensation memory provided in a decoding  
processing division. Accordingly, it is possible, by sharing  
10 the main memory, to decrease manufacturing costs of the image  
signal decoding apparatus compared with the cases of providing  
dedicated frame memories for storing a current frame data and  
a forward reference frame data inside the decoding processing  
division respectively. In addition, it is possible to reduce  
15 power consumption during a decoding process compared with the  
cases of providing the dedicated frame memories.